The Passing Lane

DANGER

HIGH VOLTAGE

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CRAB   CEAL   CRIS

Spring Training Schedule

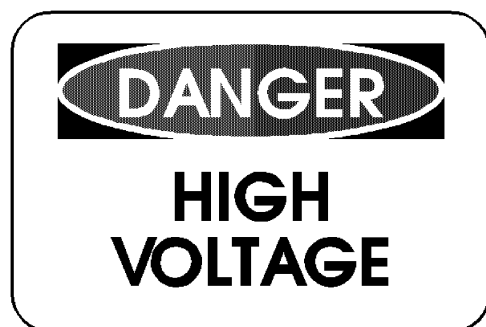|		
Introduction to Ceal	. . . .	Jan 10-11, Jan 31-Feb 1, Mar 21-22
CEAL Road Design	. . . .	Feb 2-3, Mar 23-24
CEAL Advanced Series	. . . . .	Mar 7 - 10, Apr 11-14
Introduction to CRIS	. . . . . .	Jan 25, Mar 15, Apr 5
CRIS Reporting Workshop	. . .	Jan 26-27, Mar 16-17, Apr 6-7
Maintenance Management	. . .	Feb 15
SWIBS & Bridge Management	.	Feb 9, Apr 19
Introduction to CPMPS	. . . . .	Feb 7-8, Feb 28 - Mar 1, Mar 2-3, Apr 20-21
CRIS Permits Workshop	. . . .	Jan 18-19
CEAL Eastside Workshop (in Colfax Washington)	. . . .	Feb 21-23

For reservations or information please call (206) 664-CRIS or (206) 664-CEAL.

CEAL Training for 1995

The Colfax tradition continues with a full menu of new computing nuggets to feed those hungry CEAL's. Mark your calendars: Feb 21 to 23, 1995. The folks at Whitman County promise to pull out all the stops in providing the best in training atmospheres, including oxygen, nitrogen, and trace elements. There's a strong possibility that CEAL 7.0 will be in distribution by then, giving us an opportunity to take it out for a spin. Other topics that have crossed the desk of the organizing committee are managing CAD/CEAL transfer, animating CEAL projects in Autocad, and developing prompts to solve real world problems. Other problems will be addressed as they come up. Do you have an unusual problem to solve and would like some other opinions? Bring your ideas and your data with you. We're not short of opinions or expertise (or often both).

For those who spend their winters under umbrellas on the west side, consider Mar 7 to 10, 1995 your opportunity to take part in much of the same stuff here in Olympia. In the past, this workshop has been the spark of many new ideas about using CEAL. This time won't be any different. If you can't make it to one of these, look for our follow-up scheduled for April 12 to 14 in Olympia. Ideas for things you'd like to see at this workshop? Give John Donahue a call at (206) 664-CEAL. We'll be sure to bring sufficient background materials to these events to ensure that you're interest gets covered.

New to CEAL and aren't sure where to start? You may want to skip these workshops for now and make tracks for Olympia for one of our Introductory or Road Design series. This gives you an opportunity to meet the other new county CEALs who are new to the pack. Phone in your reservation today.

CRIS Permits Workshop

The above mentioned workshop, "CRIS Permits Workshop", is being conducted at the request of several counties. The purpose of this session is to attempt to build a Permits module for CRIS. Attendees will probably learn something about CRIS and Advanced Revelation, but more importantly, we should learn how to make a CRIS module that will be useful to a wide variety of county organizations. So if you know something about tracking permits and have an idea how CRIS could help in the process, please sign up.

CRIS Survey is a Wild Success.

Earlier this fall, we sent out surveys to all 39 county CRIS contact persons. We wanted to know how we are doing. So, we asked you how many people are using CRIS and what parts of the system you find useful. We also wanted to get some idea of your future concerns. Will you quit using CRIS if it is not a Windows program?, do you want CRIS to run on an Apple Newton?, etc.

We were pleased to receive 34 responses. That's 87%. We were surprised by how many people are using CRIS and how many system modules you are using. There are approximately 250 people using CRIS and you reported an average 25% growth in users for each of the next three years.

Most users seem to find telephone support and training to be CRAB's most effective support mechanism. Most users also find the on-line help features of CRIS to be very useful. You don't seem to like the Advanced Revelation manuals. Surprise.

As for the future, Microsoft Windows is the operating environment of the future for CRIS users. Many counties (about 31) will be running networks in the near future with an even split between Netware and Windows NT operating systems. There is also an apparent interest in client-server systems and 11 counties report interest in the Microsoft Access database product.

What are our conclusions from this survey? First, we need to bring CRIS into the Windows environment. Second, CRIS data needs to be more accessible to county personnel. You need to be able to easily manipulate CRIS data with the tools you know how to use, whether that is Microsoft Access, dBase, or Lotus 123. Third, CRIS still needs to work in a wide variety of environments. Some counties will have over 50 users and benefit greatly from a client-server based system. Other counties will only have 2 or 3 users and not be using a network of any kind, and lots of counties could benefit from the ability to easily collect data with a notebook computer in the field. Finally, we don't want to fix what is not broken. The enormous effort of moving CRIS to Windows will be worthwhile only if we build a system that is easier and more fun to use, meets individual county needs more effectively,

and provides a tool that will help you meet the challenges of the 21st century.

Please don't hesitate to call if you feel you have not been properly represented by this survey, or would just like to discuss some of these issues. This is an ongoing process and we greatly appreciate your input.

Area Code Changes to 360 January 15th

Don't forget to re-program those speed dialers. CRAB central is affected by the upcoming western Washington area code change from 206 to 360. We eagerly anticipate this change and feel we are up to the challenge of answering to a higher area code. So, to make the obvious elementary, and give you something to cut out and paste on your wall...

```
CRIS Support   . (360)664-CRIS
CEAL Support   . (360)664-CEAL
Grants Support . (360)586-PLUM
CRAB BBS . . . (360)664-0946
CRAB Main Line (360)753-5989
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Dr. John's Corner

This column is dedicated to all those CRIS users who are in the know. It contains tidbits from actual CRIS support calls.

Reports Without Titles

Joe in Island county wants to know how to keep R/List report titles from showing up. This can be accomplished by using a blank HEADING and the COLHEAD command with spaces. An example using the signs file would be:

```
LIST SIGNS ROAD.NUMBER COLHEAD '      '
MILEPOST COLHEAD '      ' CODE COLHEAD
'      ' HEADING "" ID-SUPP
```

ACCIDENT Note

Everyone should be upgraded to CRIS version 2.20a. If this is not what shows up on the CRIS logo screen give Dr. John a call (664-CRIS). Fundamental accident file structure and loading changes occurred with this update. More subtle, but helpful accident module changes are coming in the next update. Future updates will not be successful if you are using the accident module and aren't at CRIS version 2.20a.

CRISmas Update Delays Announced

I don't know about you, but Christmas caught me by surprise. I thought it was supposed to come some time after the World Series. Anyway, what is this CRISmas update and why is it late? Well, hopefully, you weren't expecting a CRISmas update and you don't care that it is late.

We will be sending you CRIS users an update in January of 1995. We are just now putting the finishing touches on what we are calling CRIS version 2.30. This is a minor upgrade with the most notable change being a switch to pull-down menus. There will also be some additions to your Roadlog screen as described in the following article.

Roadlog Update Season Arrives

The time is here to perform your Roadlog Update. Your county will be receiving instructions on updating your Roadlog as of 1/1/95 (or 12/31/94 if you prefer). This year we have added several fields for you to complete that will allow you and us to better manage those portions eligible for various funding programs.

The USDA National Forest has $8 million per year for Forest Highways. Two fields ('Forest Number' and 'Forest Highway Route Number') will allow you to print the report to help the National forest in their inventory efforts.

The Freight and Goods Transportation is being mentioned as a dedicated recipient of the transportation funding increase before the legislature. Two new fields ('Weeks of Restriction' and 'Base Adequate?') will allow us to provide updated reports of deficiencies and needs.

Although Congress has not yet adopted the National Highway System, it is a reality. The new field ('NHS will allow you and us to summarize your share of NHS.

The current transportation funding package being sented to the Legislature is based on the 1994 Wa ington Roadway Needs Study. The basis of the stu the Federal and State Highway Performance Mor ing System (HPMS) sample. The new field ('HPMS Segment') will allow you and us to work with the ple easier.

With the new emphasis on keeping each legislato formed about the county roads in his/her district, please make sure that your Legislative District fie is complete and current. This will allow you and u to provide accurate information on your county ro to each legislator, including the needs, deficiencie and the impact on their constituents.

Each County Engineer and Roadlog Manager will receiving update information in early January. Please direct any questions to Dave Witcher at CF

# Fall Conferences Now in History Book.

This year's fall conferences were the most successful yet, with more than 200 in attendance at the CEAL conference, and over 50 sitting in on the Engineering Forum. Over the past 5 years, we've watched interest in the CEAL conference grow from participants in all of the interested agencies. There was an interesting balance this year between workshop and plenary sessions, with more contributions this year from our new partners in this endeavor, the US Bureau of Indian Affairs. Their Phoenix office came through with 2 workshop sessions, one about metric conversion, and one about challenges designing large projects. The counties were also out in force and contributed to an intersection design forum (thanks to Burt Thatcher and Ben Peterson at Kitsap, and Jim Giacolone at Thurston Counties), and a presentation about prompts programming from Jim Caldwell at Cowlitz County. Both Dan Dickson and Jeff Albers from CLM, and the WSDOT CAE Support Team, including those front line DEWS Coordinators, contributed extraordinarily in time and effort to help make the conference memorable with their enthusiasm and quality presentations.

The poster contest was small but a high class show. I seem to have ended up with all of the posters that were left in the hallway after the conference. If you'd like yours back, please give John Donahue a call and he'll be happy to ship it back to you. The poster area was well received and I think provided some insight into how others work. If you think so too, let me know.

Camper's Unite

That's right, the weather's turned nasty and your subgrade may have turned to cream of mushroom, but you can still get lots of work done at the

urveyor's Camp at LOMA quah January 17 through r event this year will feauland about evidence, leton on the history of ands and shoreline, and session, and Larry Benisic surveying. You'll also s from Thurston, Kitsap, sh, and King Counties. s this opportunity to dis your survey ideas and tions with other coun- Surveyors keep an eye on your inbox for your registration form, or call Sharon Anthony or Karen Pendleton at the CRAB for registration mation. (event to be fol- January 20 by WCCS peeting).
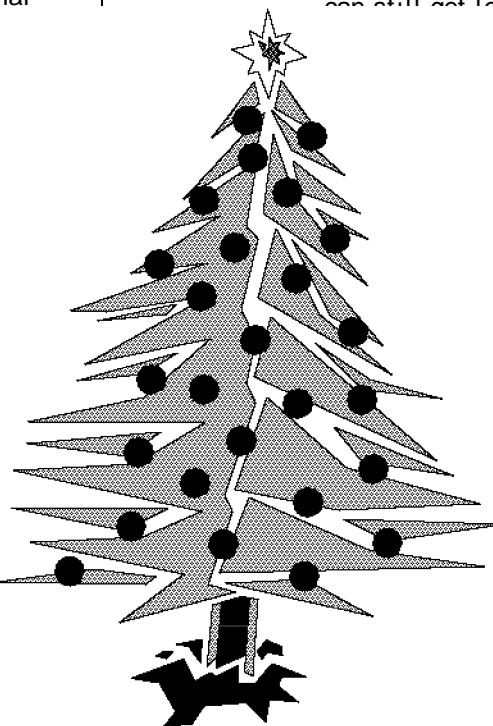
🦀 Floating Anxiety Strikes Pentium Users

There's a lot of questions surrounding the recent disclosure that Intel's much-marketed Pentium chip contains an annoying flaw in its floating point processor. The exact nature of the flaw is not available at this time, but its manifestation has been clarified by many outside the company. The CEAL program has always required a floating point processor since the beginning of its PC existence, and it relies heavily on numbers coming out of that device. Therefore, its good to know if your chip has this problem. The following test has been promoted by CLM to help discover if you have a faulty chip. At the dot:

```
D1 4195835
D2 3145727
D3 D1 / D2
D4 D3 * D2
D5 D1 - D4
Display D5
```

If you're computing properly, D5 will equal zero. If not, you have found the bug in the Pentium chip.

How important is this bug to your work? Here's Andrew Grove, President of Intel Corporation, to describe the corporate line on this mess:

In the summer of '94, in the process of further testing (which continued thru all this time and continues today), we came upon the floating point error. We were puzzled as to why neither we nor anyone else had encountered this earlier. We started a separate project, including mathematicians and scientists who work for us in areas other than the Pentium processor group to examine the nature of the problem and its impact.

This group concluded after months of work that (1) an error is only likely to occur at a frequency of the order of once in nine billion random floating point divides, and that (2) this many divides in all the programs they evaluated (which included many scientific programs) would require elapsed times of use that would be longer than the mean time to failure of the physical computer subsystems. In other words, the error rate a user might see due to the floating point problem would be swamped by other known computer failure mechanisms. This explained why nobody -- not us, not our OEM customers, not the software vendors we worked with and not the many individual users -- had run into it.

We'll be monitoring information and events about this problem and will pass along anything we learn, including any suspected implications for CEAL and CRIS.
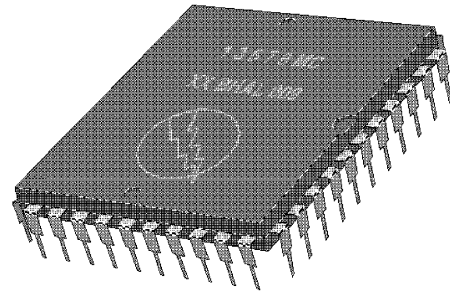
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